

Historic, archived document

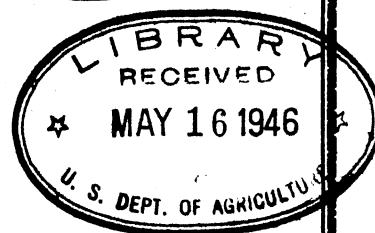
Do not assume content reflects current scientific knowledge, policies, or practices.

1.9
An 528

JUL 1-1938

Reserve

The EXTENSION ANIMAL HUSBANDMAN



**UNITED STATES DEPARTMENT
OF AGRICULTURE
WASHINGTON,
D.C.**

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION ANIMAL HUSBANDMAN

Issued quarterly by the Bureau of Animal Industry
and Extension Service, Cooperating.

C. D. Lowe, Senior Extension Animal Husbandman,
K. F. Warner, Senior Extension Meat Specialist.

Serial No. 50

--June 1938

<u>Special Articles in this Issue:</u>	Page
What is This Coordination?, by H. W. Hochbaum	2
Changing Kansas Beef Cattle Practices, by J. J. Moxley	5
Georgia Makes Progress in Beef Cattle Shows, by R. E. Davis	10
Lamb Improvement in Missouri, by T. A. Ewing	13
Swine Management and Sanitation Demonstrations in South Carolina, by A. L. DuRant	16

Also:

Personnel Changes	4
Idaho Livestock Marketing Data, 1937	9
Horse Work in Iowa, 1937	12
A. B. Graham Retires	12
Livestock Grading in Virginia	15
New Film Strip Available	15
Livestock Breeding Possibilities	19
Recent Publications	22

WHAT IS THIS COORDINATION?

By H. W. Hochbaum,
In Charge, Subject Matter Specialists and Eastern Section,
Extension Service, U. S. Department of Agriculture.

- - -

Is coordination just another current watchword in extension circles? Or is there a fundamental need in agricultural educational work which must be met? What should coordination mean? How may we coordinate?

Coordination should be more than a shibboleth. There is real need for real coordination. Real coordination is more than working together - more than the term "cooperation" implies. Coordination should mean a group analysis of the situation and problem with common agreement on facts and hypothesis, and common interpretation of these. Then should come a planning together to meet the situation, and common educational work in helping the people affected by a problem to understand this and to learn how to meet the problem successfully.

Coordination means that the problem approach rather than the project approach is employed. Extension workers are realizing more and more that the problems of the average farm family and the things which may be holding back agriculture most lie far deeper than this or that specialty. They call for more than approved production practices. This realization has grown immeasurably with the development of the great national programs and the recognition that the extension programs must be and are headed for the same place - that is, improvement of the farmers' economic and social status.

What do we mean by larger problems? One of the Northern States has a series of counties in which the incomes are perilously low. Thirty to forty percent of the farmers have been on feed relief. On many farms there isn't enough cleared land to produce the required feed or to allow other crops or enterprises to be developed in order that the farm business may be balanced and increased. The farm debt is a big millstone around the neck of the average farmer. Naturally, the livestock specialist or the dairy specialist cannot in such emergencies stop at recommendations for better breeding practices or balanced rations. Agronomists, supervisors, farm management specialists, livestock specialists, poultry specialists and others will need to work together with the local people and with the representatives of the national programs for

agriculture to get the facts on the basic situations. Then, they will work to arrive at new policies, programs, and plans and all join in attacking the major problems, - namely, how to decrease debt, how to produce more and better forage, how to increase the balance of enterprises.

The drive for more and better pastures, hay, and legumes has resulted in millions of acres being devoted to their production. We are working toward a grass husbandry in large areas. Do we realize the most fundamental adjustments which must be made? Will the South increase its livestock? What kind shall it be for this or that situation? What type of farms are best adapted? What, if any, land acreages must be added to individual farms? What shall the new farm business organization be? Surely it is obvious that the livestock specialist must join other specialists and with the representatives of the AAA, SCS, FSA, FC, and develop a joint hypothesis. Then, together with the local people all will study the situations, get new facts, arrive at new solutions and plan to help people make the needed adjustments. Confusion confounded will persist, if we do not all get together and see the larger implications, the larger problems, larger plans, and need for a coordinated attack.

We cannot coordinate by merely bringing the facts which one specialist may have gathered in the past together with the facts other specialists have developed. First and last, all together must study situations and the problem, the larger problem as it actually exists. Together they must get new facts, interpret them, test their hypothesis in the light of such facts and work out a new and coordinated program.

This is what our specialists are doing increasingly. The new and greater opportunities for extension leadership are being seized. New and more fundamental programs are being developed. Gradually county agents are being relieved from the load of a great miscellany of highly specialized and departmentalized projects and demonstrations. Fundamental land use and economic facts are being studied and policies being developed. The specialist is coming to be more than a specialist. He will give more than specifics as he is coming to be more of an analyzer, a student of basic needs which may be holding back the agriculture of county and State. Yet, at the same time, he is learning more about his specialty for he is coming in contact with the situations of many more farmers. As he works in coordinated fashion with other specialists and with the representatives of the national agencies, he may find too that the old precepts and practices need to be

readjusted. For today, several million farmers are carrying out farm practices under the national programs, with many widely differing situations. It is our concern in extension to see that these farmers accept the practices of most significance in the improvement of farming and that they win success and satisfaction with whatever they have adopted. New clients, new problems, larger problems, all present greater responsibilities to the extension worker, greater need for real analysis, real interpretation, real planning and common attack - in short, coordination.

-----oOo-----

PERSONNEL CHANGES

California

D. T. Batchelder is now acting as assistant to L. H. Rochford, extension animal husbandman of the California extension service.

Maryland

Kenneth C. Clark, who has devoted part time to extension duties with the Maryland extension service, recently resigned his position to engage in private work.

Nebraska

S. W. Alford, a veterinarian, is now devoting half time to the animal disease phases of the animal husbandry project in the Nebraska extension service.

Oregon

R. G. Johnson, a range management specialist, is now devoting part time to the animal husbandry project in the Oregon extension service.

Puerto Rico

Carlos Gaztambide is assistant animal husbandry specialist in the Puerto Rico extension service and has immediate charge of swine, work stock, and minor livestock phases.

Tennessee

C. C. Flanery, for many years sheep specialist of the Tennessee extension service, resigned his position effective May 15, 1938.

-----oOo-----

CHANGING KANSAS BEEF CATTLE PRACTICES

By J. J. Moxley, Extension Specialist in Animal Husbandry,
Kansas Extension Service.

- - -

The Kansas beef production program is based on the utilization of Kansas grasses, roughages, and a limited amount of grain. Conditions which vary widely in the State include a full-feeding area, a general farming area, a long-grass grazing area, and a roughage wintering area; but all are interested in selling crops through cattle. The cattlemen handling the farms and ranches in these areas still further diversify the picture by their likes and dislikes for certain systems of beef production. Any specific molded program will not fit them all equally well.

Since most animal husbandry specialists have similar problems, it is not necessary to go into detail, but merely state briefly that, as they have no doubt found, there are certain production practices that have worked consistently well and still others that cause a big turnover among cattlemen because of too great dependence on conditions outside of their control, such as cattle price margins and feed prices.

In analyzing cattlemen's problems, we find that sometimes the farming operations or organization may be at fault, sometimes the cattle management; again it may be the class or weight of cattle handled, and of course violent market fluctuations are the greatest hazard for the man who depends on margins and a short gain.

The Kansas extension effort has been toward a safe conservative type of beef production that will produce a good-quality, light-weight beef animal to fill the bulk of the demand and that will fit the greatest number of farms. We have avoided the more speculative types of production such as handling the "sometimes" highly profitable big steers, or buying common cattle for a quick turn. Since there is no good reason why this State should raise common steers, we have not fostered any phases of this kind of production. It is not efficient or sound production even though an occasional handler may make a big profit.

A field study of most any State's cattle industry will offer a lead to why certain things work for the average man and why others do not. Such is the case in Kansas.

Basic facts that show up in a scrutiny of our cattle industry may be listed as follows:

1. Good-quality cattle are the basis for efficient and profitable production of a quality product, though that in itself is only an aid to and not an insurance of profit.
2. Poor farming methods and organization may offset even the best beef-production practices.
3. The proper utilization of feeds by conservation and by using correct feeding methods reduces the risk and increases the farm return.
4. The man who raises his own cattle and his own feed is the hardest for adverse circumstances to whip.
5. Early spring calves are more profitable than late ones.
6. Large gains on home-produced roughages and grass give a safety factor either when coupled with a final grain feed or without it.

The last fact has been the basis for the major phase of the beef-production program carried in Kansas; namely, the production of good-quality, heavy, feeder calves and "deferred-fed" steers (whereby steer calves are purchased, wintered well, grazed during the first 90 days of summer and then full fed for a fall market). However, in certain areas where grass, roughage, and grain are not all available, the program must be varied.

The recognition of a problem and the changes that should be made are, of course, relatively easy compared to making the actual changes. Kansas farmers and cattlemen, like most others, do what they think, at the moment, is the best job they can under their circumstances. Many of them frankly admit that they know better than they do, or think they can do.

Thus, the human element plays a most important part in any progress made. None would object to using a better bull or producing heavier calves. The first step is to change their attitude so they think they can. The top 5 or 10 percent of our men are doing real well as it is. They are the ones that really need little help as they are as receptive of suggestions as the opposite extreme are immune to them. If the large latter group did as well as the top group, the task would be relatively simple. The fact remains that the bottom group need not only information but incentive. In

justice to many, however, we must realize that the past five years have reduced the ambition of a lot of men because of drought and price conditions. Anyway, as far as actual results are concerned, it takes more than just information to get a big majority of men to make the strenuous effort necessary to improve their practices.

We have approached it with the idea that schools were useful in bringing them information, that demonstrations, under their conditions, let them see it in operation at home, and that tours and demonstration meetings popularize it enough to get them to act.

In our improvement phase we use the purebred breeders a good deal as there are usually from 5 to 25 or more in each county. They are natural leaders, or should be; if not, they will soon be out of the purebred business. In our major beef-production counties, there are organizations such as the Comanche County Hereford Association, which assists the county agent in his beef program. These breeders will cooperatively put out a county show herd at the county, district, and State fairs under extension organization.

Briefly, the rules are that this county show herd shall consist of ten head, five bulls and five heifers, and must be made up of cattle of at least four breeders with no breeder having over four head. Young cattle of certain ages are required. This county show herd is selected at a preliminary show in the winter or spring previous to the fall shows. Anyone in the county is permitted to bring his prospects in to the show. This event is widely advertised and usually brings in about 50 head of young show prospects and two or three hundred cattlemen. Since show prospects are selected, there is always the commercial as well as the purebred breeders' incentive to pick his kind of bull and watch him develop in the hands of the neighbor. In the fall the fitted cattle are returned for a final show at the county fair and the winning group of 10 head represents the county at the State fair.

The result has been that approximately 100 purebred breeders exhibit at the State fair instead of the former eight or ten professionals; and that the home folks follow their show string like they would the home-town baseball team. The State fair premium list is adapted to this program. During the three years that this plan has been in operation, there has been more interest in good cattle and their care than was stimulated by any previous program. There has been a standardization of type and, since the prospects are selected as young cattle in ordinary condition, the commercial cattlemen can appreciate their good points. As breeders are permitted

to buy show herd prospects to within four months of the show date, they have bought many prospective herd bulls and good heifers that will eventually be used in their breeding herds. In fact, during the past year, there has been a mild scramble for every good bull and heifer prospect in the State. The plan offers a means to bring recognition to the small breeder who is producing cattle of merit.

The question arises as to how this helps the commercial producer. The answer is that he knows who is producing the good bulls and looks there for his breeding bulls. The breeder of non-descript purebreds, either makes improvement to keep up with the trend or drops back into producing cattle for the commercial market. Since it is "Neighbor Jim" who is trying to make "the team" with his bull or heifer calf, the commercial man gets to boosting, attends the various cattle meetings and soon is so disgusted with his own bull, if it is not a good one, that he picks up not only a better one, but some other good production ideas as well. The wave of enthusiasm stimulates men to get better cattle and that naturally leads to improved methods of handling. Though this plan is worked on a county basis in beef cattle, it works equally well on a district basis in the dairy field here in Kansas.

Result demonstrations in Kansas are established to show certain management, feeding, or breeding practices such as the production of creep-fed calves, early calves, or deferred-fed steers. Though the data collected are not experimentally accurate, they serve the purpose for practical application. Since a statement that a certain lot of February 15 calves weighs an average of 525 pounds at weaning time can be publicized better than that the same calves would be called heavy calves, we try to obtain information in a specific form that can be printed.

A successful beef-production layout involves so much more than just the cattle, that we are now stressing the farm organization, especially such information as that a carlot-size farm that produces thirty 700-pound finished calves, needs 900 bushels of grain, 100 tons of silage, 10 tons of alfalfa, and a certain acreage of grass. We feel that such a presentation invites attention to the basic part of any beef program, the production of feed and grass.

During the late summer and fall, we have a tour of the demonstrations in each county carrying the project when the calves or steers are about "ripe for market." Again the breed organizations help the county agent in lining up the tour to include instructive stops, not only to see the beef-cattle demonstrations, but also to provide information on related subjects such as dipping vats, feed variety tests, and pasture improvement work. Incidentally, there is a barbecue or basket dinner.

A State beef-production contest of demonstration calves and a carlot show for farm-produced young cattle also offer a chance to create interest in the methods used by the men doing the best work. Though our cattle outfits run from a small farm with 12 or 15 head up to others with eight or ten thousand, the fundamental problems and solutions are the same, though adjustments are necessary in their application.

-----oOo-----

IDAHO LIVESTOCK MARKETING DATA, 1937

Market data were compiled on 57,077 cattle, of which 8,277 were sold and weighed at home, 40,183 shipped to western markets and 8,617 to eastern markets. In connection with this work, weights were secured on 1,288 steer calves, 1,607 yearlings, 4,930 two-year-olds and 452 three-year-old steers. Calves and yearlings sold mostly as stockers and feeders, 51.6 percent of the calves and 41.6 percent of the yearlings going as stockers. The two- and three-year-old steers went either direct to market as grass-fat cattle, or to the feed lot, 50.2 percent of the two-year-olds and 45.6 percent of the three-year-olds going direct to market as grass-fat cattle. Figures obtained on 20,552 range steers give an average value of \$20.93 for the calves, \$41.21 for the yearlings, \$59.02 for the two-year-olds and \$74.10 for the three-year-olds. The calves sold at an average of \$20.93 from the range, and \$64.03 from the feed lot. The yearlings sold as feeders at an average of \$42.48 and at \$74.48 when finished. Two-year-old steers sold as feeders at an average of \$53.71, and when fat were worth \$95.71. The three-year-olds increased from an average of \$67.91 off the range to \$95.42 after a short feeding period. * * * * *

Of the 49,598 farm lambs sold, 39,589 were shipped to the central markets, whereas 10,009 were sold at home. The home sales consisted of 4,249 fat lambs, averaging 87.6 pounds, and selling at an average of \$8.19 per hundredweight, and 5,760 feeders, averaging 75.5 pounds, which sold at an average price of \$7.64 per hundredweight. The combined weights and prices of the home sales for the season gave an average receiving weight of 80.7 pounds, selling at an average price of \$7.89 per hundredweight.

The average receiving weight of the shipped lambs was 83.0 pounds, and the average market weight 79.0 pounds. On the market they sold at an average of \$10.16 per hundredweight. After deducting the shipping expense, the shrinkage and payment for 41 lambs lost in shipping, the yearly average value of the lambs on the basis of the receiving weight was \$8.62 per hundredweight.

---E. F. Rinehart, Annual Report

-----oOo-----

GEORGIA MAKES PROGRESS IN BEEF CATTLE SHOWS

By R. E. Davis, Beef Cattle and Sheep Specialist,
Georgia Extension Service

- - -

The fourteenth and last of Georgia's fat cattle shows and sales held during 1938 was concluded in Macon on April 26. Beginning in Augusta on February 22, the show-sales were held at Albany, Sylvester, Blakely, Metter, Sylvania, Savannah, Moultrie, Columbus, Milledgeville, Swainsboro, Tifton, Atlanta, and Macon, selling a total of 2,702 head of fat cattle for an amount approximating \$175,000.

These annual show-sales events date back to 1932 when the first one was held in Savannah with 70 head of cattle making up the offering. Savannah has held a similar event each year since. It is estimated that 95 percent of the cattle in Savannah's first show graded below the U. S. Medium grade while the 1938 show contained 344 head grading U. S. Medium or better and 166 head below U. S. Medium, a percentage of 67 percent grading Medium or better. In this number there were four U.S. Prime grades, 67 U.S. Choice grades, 112 U.S. Good grades and 161 U.S. Medium grades.

In four shows this year, namely Augusta, Albany, Savannah, and Moultrie, out of a total of 1,278 head exhibited and sold, there were 9 Prime, 123 Choice, 301 Good, 300 Medium, 246 Plain and 298 head which were not graded. Grading of these steers was done by L. B. Burk of the Washington office, Bureau of Agricultural Economics.

In the other ten shows, at which Mr. Burk could not be present, C. G. Garner, marketing economist for the Georgia agricultural extension service, did the grading and the percent in all of these shows ran about in proportion to those at which Mr. Burk graded.

Some of these shows represented the first attempt on the part of the committees in their respective locations while others have run from 2 to 5 years.

The years 1935 and 1936 probably showed greater numbers of entries than any other years but the grades and quality were not very outstanding; certainly not so high as was the case this year.

What is the reason for this improvement in quality and finish? The two junior organizations, the 4-H Club and the Future Farmers of America, are the answer. In 1935, there were less than 100 club calves

exhibited at the shows - all 4-H Club calves. In 1936, there were 300 club exhibits, again all 4-H Club calves. In 1937 and 1938, there were 1,200 to 1,500 4-H Club calves exhibited and 1937 showed 40 head from the F.F.A. members and this year the same group showed 200 head.

Another question arises, - does this tell us anything? These junior boys and girls are keeping records of their projects and where they have shown and sold their calves. They are in position to know just what they have gained from a financial standpoint and are able to say just how much has to be charged to experience. Not often has the charge for experience been made after the first year. In fact, most of the boys and girls have shown a successful financial adventure in their first year. In addition to the expense, most of them say that the experience that they have derived from this venture has been worth all it has cost them. Invariably the quality and finish the second year with the junior boys and girls have shown a marked improvement.

The banks have played their part also in these shows. In most cases the boys have needed some help in finances and the bankers and some of the packers of the State have responded very generously. While we hope the banks and packers are going to stand by, our plan is for these boys and girls gradually to set up in business for themselves and work into the position of being able to carry their own project. One of the methods of doing this is by starting out with a heifer to use for breeding in addition to the steer for the butcher. This we hope to enlarge to the extent that we can produce our own supply of feeder cattle instead of going beyond the State boundary for this supply.

That this condition is already being met to some extent is shown by the number of animals that were exhibited this year in the home-bred classes. It is interesting to note that in every show this year, except one, the grand champion of the show was a Georgia-bred steer, indicative of the fact that feeders are waking up to the knowledge that good beef cattle can be produced in Georgia. The increased demand for good beef-type bulls within the State to be used on the native cows, we feel, has been brought about in large degree as a result of these annual shows and sales.

Our carlot exhibits in the adult sections of the 1938 shows were far superior to the carlot exhibits of any previous year. Although only a very few of the carlot exhibits were Georgia-bred steers, there were several of such origin that were able to get into the prize money in nearly every show, which gives us room for optimism in the progress we are making in producing our own feeder cattle.

With the interest that is being shown by the junior organizations, the packers, the bankers, and the civic organizations throughout the State, we have every reason to believe that the time is not far distant when Georgia will be producing a greater percentage of the beef that we are consuming within the State and that it will be equal in quality to any that could be brought in from without the State.

-----oOo-----

HORSE WORK IN IOWA, 1937

The Iowa Horse and Mule Breeders' Association, through an appropriation from the State, maintains Harry Linn as field man for educational and promotion work. For this reason the extension workers at the college have done very little horse extension work, although the animal husbandry project carries a horse phase which was prepared with the cooperation of Mr. Linn and with the understanding that most of the field work such as demonstrations in colt breaking and training and in the use of multiple hitches would be conducted by him.

The project was offered the counties and considered by them in the same way and the county agents gave the same help in carrying it out as would have been the case if the field work had been handled by the college specialists.

Some phase of the horse work other than colt clubs was included in the programs of 81 counties. Demonstrations in colt breaking and the use of multiple hitches were conducted in 22 counties. Colt clubs were organized in 92 counties with 1,326 boys and girls completing the project. A total of 1,526 colts were fed and exhibited at the club shows and fairs by these club members.

--Rex Beresford, in Annual Report

-----oOo-----

A. B. GRAHAM RETIRES

After 22 years of service in the U. S. Department of Agriculture, Mr. A. B. Graham was retired, because of age, on March 31, 1938. His co-workers and friends in Washington extended him a testimonial luncheon prior to his departure at which some 200 persons were in attendance. Mr. Graham has taken up his residence at Columbus, Ohio, in which State he was the first director of agricultural extension work. All who know Mr. Graham wish him continued health, happiness and many more years of useful service to the causes he has so long and so successfully espoused. Mr. H. W. Hochbaum has succeeded Mr. Graham in charge of subject-matter specialists in the extension service of the Department. --C. D. Lowe

-----oOo-----

LAMB IMPROVEMENT IN MISSOURI

By T. A. Ewing, Extension Animal Husbandman,
Missouri Extension Service

- - -

Missouri's plan of sheep improvement, launched in 1926, was designed to improve the quality of early market lambs. The justification for such a plan may be shown by the fact that an experiment was conducted at the Missouri experiment station under direction of Howard Hackedorn and results published in 1913 to show the value of a good registered ram as compared to a grade ram. Yet after thirteen years folks were still using grade rams. The plan was inaugurated by the holding of meetings in the counties to contrast grade versus registered rams and lambs sired by them. Still farmers continued to use grade rams. In order to make good registered rams more readily available a series of public sales was begun in 1926. The following table shows the progress of the sales and also the total number of rams placed by years.

Year	No. purebred rams sold in sales	Total no. purebred rams placed	Average price per head in sales
1926	33	158	\$ 42.50
1927	180	304	40.00
1928	225	527	47.00
1929	335	673	46.70
1930	284	732	30.10
1931	458	1,250	28.00
1932	518	1,370	17.80
1933	552	1,028	18.36
1934	574	1,394	21.66
1935	623	2,047	26.88
1936	700	2,535	29.51
1937	728	2,981	31.64

In 1936 a series of district meetings was held to which groups of county agents were invited in order that extension animal husbandmen might show them how to conduct parasite and ram meetings in their respective counties. At these meetings the agents and their farmers had the opportunity to see grade and registered rams and lambs sired by them, and some lambs infested with stomach worms, which were posted to show the fact that sheep have stomach worms and tape worms, and where to find them. County agents said these meetings sold more bluestone, nicotine sulphate and dosing syringes than all the circular letters, bulletins, and newspaper articles that had

been printed. The meetings were advertised as parasite meetings and then pressure was turned on the value of good rams. These meetings brought good support to the ram sales despite the dry weather and grasshoppers.

The rams are selected for the sales on the basis of breed type, quality, and development. The sales have been influential in getting breeders to do a better job of getting their rams properly developed and in using better sires to head their flocks. District meetings were held the past two years where the breeders brought their stud rams and some yearling rams together for comparison. No attempt was made to rank the rams but merely to point out desirable and undesirable characteristics. The result was that a number of breeders purchased stud rams following the meetings.

An outgrowth of the sales was the organization of the Northeast Missouri Hampshire Breeders' Association. It has some twenty-six members. They have an annual picnic in October when they show their sheep and make a profitable day of it. They are buying the best stud rams they can find and are furnishing a much more desirable class of rams than were available at the time the association was organized.

The breeders take the rams to the place of the sale. It is believed that farmers are taught what to look for more quickly by seeing 30 to 40 rams together than if he orders a ram by mail or has someone to select the ram for him. At the beginning of the sales the largest ram in the sale usually brought the most money but now the better growers are looking for deep-bodied, compactly built rams with masculinity, constitution, quality, and dense fleeces.

Winter meetings are held to discuss the place of protein supplements, wheat bran, and minerals in the bred-ewe rations where legume hay is not available.

Ninety-eight percent of lambs are now being docked and castrated.

Feeding grain to lambs is a profitable practice when pastures are poor and because of dry weather and grasshoppers Missouri has had many poor pastures in recent years.

Dipping for ticks and lice is growing rapidly. The community dipping vat is preferred to the portable vat because farmers see how their flocks compare with their neighbors. Meetings were held the

past two seasons to teach better methods of shearing, tying, removal of tags, etc., so as to present a more attractive fleece to the market.

Sheep have been more profitable when properly handled than any other class of livestock over a long period of years in Missouri.

Missouri's dog law was revised at the last session of the legislature making it a local option affair. It will be voted on in several counties this fall and if carried will encourage growers to buy better breeding stock knowing that they will have protection against losses incurred by dogs.

-----oOo-----

LIVESTOCK GRADING IN VIRGINIA

Information has been tabulated for 75,147 head of livestock graded in Virginia in 1937, consisting of 73,766 lambs, 1,148 sheep, and 233 veals from 33 counties, as compared to a total of 33,514 lambs graded from 26 counties in 1936. The lambs graded as follows - Choice, 33,821 head or 45.8 percent; Choice Heavies, 723, or 1 percent; Choice Bucks, 853, or 1.1 percent; Good, 23,866, or 32.4 percent; Good Heavies, 222, or .3 percent; Good Bucks, 2,188, or 3 percent; Medium, 8,464, or 11.5 percent; Medium Bucks, 1,579, or 2.1 percent; and Plain, 2,050, or 2.8 percent.

--C.P. McClaugherty of the Va. State Marketing Bureau

-----oOo-----

NEW FILM STRIP AVAILABLE

"Roundworms and Swine Sanitation" is the title of a new film-strip series just issued by the U. S. Department of Agriculture. It consists of 34 frames and illustrates the control of roundworms and filth-borne diseases of young pigs. Copies are available at reasonable prices from the Division of Cooperative Extension, Extension Service, U. S. Department of Agriculture, Washington, D. C.

-----oOo-----

I have observed that a new thing always originates in a single mind, usually the brain of a poor man. It is not the product of great wealth and a great laboratory. Money only develops, it never originates; I guess because money doesn't work in a woodshed. --Francis Jenkins

-----oOo-----

SWINE MANAGEMENT AND SANITATION DEMONSTRATIONS IN SOUTH CAROLINA

By A. L. DuRant, Livestock Specialist,
South Carolina Extension Service.

- - -

The swine management and sanitation work in South Carolina is conducted jointly by the livestock sanitary department and the extension service of Clemson College cooperating with the U. S. Bureau of Animal Industry. The system recommended is that worked out by the Bureau of Animal Industry for the control of kidney worms in swine. Essentially it involves getting the hogs out of the old infested lots and on green forage with a bare strip plowed around the edge of the field which, when carried out, will also control the other internal parasites which are common in our hogs such as the roundworm, the lung worm, and the thorn-head worm.

The loss due to kidney worms in this State was called to our attention at a meeting at the Ballentine packing plant in Greenville, S. C., on December 19, 1935. At the suggestion of the management of this plant, Director D. W. Watkins, of the extension service invited the county agents and representative hog farmers from hog producing counties to this meeting. About 100 farmers and extension agents attended. Dr. Frank Kitchen, veterinary inspector in charge, took these men through the plant and pointed out the parts of carcasses that were affected. He stated that 90 percent of the livers and kidneys and even parts of the loins were condemned as unfit for food due to these parasites.

Some work had previously been done by Dr. E. E. Lent, B.A.I. veterinarian, cooperating with the State veterinarian's force on controlling worms using mostly the McLean County system. One of the pioneers in using plowed bare areas to control kidney worms in this State is Sgt. Marlen P. Cain, stationed at Marine Barracks, Post Farm, Paris Island, S. C. He and Dr. Lent demonstrated its value before the extension service took it up as a definite project or demonstration.

In the spring of 1936, at the invitation of Dr. W.K. Lewis, State veterinarian, and the extension service, Dr. H.B. Raffensperger, at that time in charge of the swine sanitation work at Moultrie, Ga., visited South Carolina. Six meetings in the principal hog-producing counties were arranged by the county agents at which Dr. Raffensperger explained in an interesting way the life history and the system of control of the kidney worm, lung worm, roundworm, thorn-head worm and other common internal parasites. Two hundred and fifty-nine farmers

attended these meetings and seemed to be much interested in the subject. Since it was March when these meetings were held it was rather late for doing much that year, so few demonstrations were started until later.

In 1937, Dr. Lent working with the State veterinary department assisted the extension livestock specialist through the county agents in putting on swine sanitation demonstrations. Forty demonstrations were lined up in the main hog-producing areas using the plan of controlling kidney worms as outlined in U.S.D.A. Leaflet No. 108. Regular visits were made to these demonstrations. Balanced rations including protein and mineral supplements were suggested for the sows before farrowing. Forage crops consisting of rye, oats, barley and rape were suggested for spring litters and green soybeans for late summer and fall litters. A bare strip of ground 30 feet wide was provided at one end of the forage for the farrowing house, pig creep, hog waterer, and sow pen. A bare strip 5 feet wide was plowed around the other three sides of the pastures. The sows and litters were kept in such places until the pigs were weaned. The pigs were then moved to fresh forage crops and kept away from old hogs until marketed or until they took their place in the breeding herd.

The farmers who conducted these demonstrations were well pleased with the results obtained. The sows farrowed stronger pigs, saved more of the pigs, and they were more thrifty and grew off faster. In many cases the pigs were put on the market the same time as pigs 4 to 6 months older.

In order that other swine breeders might see the results of these demonstrations nine field meetings were held with an attendance of 507 farmers. These farmers were favorably impressed with the forage system, the feeding and management practices and the results shown by the thriftiness and growth of the pigs. These field meetings were a great help in showing farmers what the swine sanitation demonstrations really are and the results that they may expect from following the system.

The report on the post-mortem findings on these demonstration hogs was not as complete as we expected. Many of the pigs were sold for breeding purposes, others were sold to different markets which made it difficult to get reports. Yet the ones we were able to secure showed that we had made progress. The following is a report on some of the demonstration hogs.

Post-Mortem Findings on Swine Sanitation Hogs

<u>Name</u>	<u>Hogs reported</u>	<u>Livers condemned</u>	<u>Kidneys condemned</u>
H. H. Heigler	50 (Mar.)	0	-
	40 (Sept.)	5	-
A. D. Graham	15	4	0
J. M. Thomas	34	6	-
C. F. Prettyman	5	0	0
Boyd Atkinson	5	0	0
T. S. Rogan	15	11	0
Total	164	26	0

In 1935 the Ballentine Packing Company of Greenville, S. C., the only packer then in the State, and using mostly South Carolina hogs, reported that 90 percent of the livers and kidneys were condemned as unfit for food. A recent report secured from this packing plant gave the following data:

<u>Period</u>	<u>Hogs (Number)</u>	<u>Approx. yield of livers (Lbs.)</u>	<u>Livers condemned (Lbs.)</u>	<u>Percentage condemned (Percent)</u>
April 1936	2,380	5,950	2,655	45
Nov. 1937	2,762	6,905	5,860	85
Jan. 1938	3,789	9,472	8,663	91
Feb. 1938	4,539	11,437	8,325	73
Mar. 1938	5,280	13,200	3,415	26
Total (5 mo.)	18,750	46,964	28,918	
Average percentage of livers condemned				62

This report shows a general improvement in this plant. In 1935 over 90 percent of the livers were condemned, and in the period from 1936 to 1938 an average of 62 percent of livers were reported as unfit for food.

In all the swine sanitation demonstration hogs on which post-mortem reports were obtained only 14 percent of the livers showed infestation.

The farmers who conducted these swine management and sanitation demonstrations were well pleased with the results obtained. The visitors who saw the demonstrations commented on the simplicity of the outlay and the thriftiness of the pigs. We feel that the meetings held at these demonstrations were well worth while and that many farmers will incorporate this plan of controlling internal parasites in their system of hog production. With the bare-strip method and better feeding, the loss from internal parasites will be greatly reduced in South Carolina hogs.

LIVESTOCK BREEDING POSSIBILITIES

(Excerpts from the Spragg Memorial address of Secretary Wallace at Michigan State College, East Lansing, Mich., April 21, 1938).

* * * If we leave dairy and poultry out of account we may say that livestock breeding operations today are in much the same state as the corn-breeding operations were previous to 1910. In all too many cases the graduates of the animal husbandry departments of the agricultural colleges assume that the placing of an animal in a livestock show really determines relative genetic merit. Outside of poultry and dairying the whole animal breeding field is still permeated in large measure with the thought of showing excellence as contrasted with functional excellence. Nowhere in animal husbandry is there a test which means as much as the yield test in corn. The closest approach is in poultry, but the egg-laying contest is only a partial approach and in certain respects can be improved on very greatly. * * *

In the case of swine and beef cattle, no really satisfactory yield testing has yet been done outside of Denmark. In Denmark for the past 30 years the breeding centers have, of course, done a remarkable job. Year after year four pigs from the offspring of each of the different sows involved in the test have been given the same feed, and at a given weight their carcasses have been compared. We in the United States have done a little work along the same line, but it has as yet had no effect whatever in our swine breeding operations. * * * We know that certain pure breeds of swine will oftentimes cross to produce more rapid gains and more economical gains than will the pure breeds themselves. But sometimes this is not the case. We don't know just which strains within one breed will cross with which other strains in another breed to produce the best results. The Department of Agriculture in 1934 imported some of the Danish Landrace and Danish Yorkshire swine. In crossing with American breeds of swine some very unusual results were obtained. When the crosses were repeated another year, however, the results were just ordinary. The question is just which strains of Danish swine should be crossed with which strains of American swine. There must be enough inbreeding and enough line-breeding to produce a considerable degree of homozygosity in both the Danish and the American swine, before consistently good results from such crosses can be expected. Large numbers of inbred and line-bred strains must be produced and then as a result of the large number of crosses it may be possible to discover the strains that combine to the best advantage. When the right homozygous sire strains and homozygous dam strains are discovered, it may be found that both strains are within the same breed or they may be in different breeds.

From a practical point of view the breeding system in swine then becomes as follows: It is the function of certain purebred breeders to maintain in homozygous form the foundation stock to furnish boars to the practical feed lot farmer. It becomes the function of another set of purebred breeders to furnish in homozygous form line-bred strains of sows which have been proved by previous experiments to combine well with the homozygous strains of boars. This all sounds complicated and expensive. And undoubtedly it is at the present time. And yet I am convinced that if we made the necessary modifications indicated by experience, some such system as this will eventually prove to be just as significant with hogs as the hybrid corn system is with corn. The farmers in order to get the best results would find it necessary continually to come back to the purebred breeders for their foundation stock.

The purebred breeders under this system would have a function many times as important to the practical farmer as is the case at the present time. I am sure that it will only be a few years until a large number of the purebred breeders will gradually shift their plans to help in an approach of this type. I am convinced the average purebred breeder has sufficient of the practical farmer in him so that he wants to cooperate to the utmost to enable the farmer to turn the minimum of grain into the maximum of satisfying meat for the ultimate consumer. Both the breeder and the farmer are interested not in show-ring ribbons but in those methods that will enable the farmer best to serve the consumer. Working in this direction, I am convinced both the breeder and the farmer want the maximum of cooperation from the experiment stations, the Department of Agriculture, and the packers.

The method which I have described here might briefly be called the method of homozygosis followed by controlled heterosis. It is only by some such method as this that the gamble can be taken out of livestock breeding. It is only by some such method as this that the purebred breeders can serve the practical farmers to the utmost. I hope the Animal Husbandry Division of the United States Department of Agriculture and animal husbandry departments of the various agricultural colleges, and the animal husbandry extension agents throughout the land can join together gradually to make it possible for animal breeding to make progress along some such lines as these. The principles can first be worked out in chickens and swine, next in sheep and dairy cows and finally in beef cattle.

The establishment about a year ago of a regional swine-breeding laboratory at Ames, Iowa, in which the Corn Belt experiment stations and the Department of Agriculture are cooperating is a significant

step in this direction. In this laboratory intensive effort is being given to the development of strains with varying intensities of inbreeding and to the perfecting of means that will make possible the evaluation of these strains, as well as the evaluation of individual sires in the herds of breeders.

One of the real handicaps in the development of superior strains of meat producing animals has been the lack of adequate means of measuring performance. The Department of Agriculture is now devoting a great deal of energy to devising such methods. Once such measures are perfected it is believed that breeding progress in these species will proceed at an accelerated pace. If this is to be accomplished, however, less emphasis will need to be placed on an animal's appearance and more on its breeding qualities. The animal husbandry staffs of our agricultural colleges have a great responsibility in bringing about this change of emphasis in the selection of breeding animals, as well as in the development of better ways for measuring performance and for carrying this knowledge to practical fruition.

-----oOo-----

It is provided in the very essence of things that from any fruition of success, no matter what, there always comes forth something that makes still greater effort necessary. --Walt Whitman

-----oOo-----

If you are an executive, don't bother with details. Organize. Deputize. Supervise. --Dale Carnegie

-----oOo-----

One criticism of any age might be that its realities lag behind its ideals and its practices behind its knowledge. --Wilbur J. Fraser

-----oOo-----

Each new possession, whether a "worldly good" or a new idea, raises the problem of storage. --Roy H. Waite

-----oOo-----

"He who never does more than he is paid to do, never gets paid for more than he does."

-----oOo-----

RECENT PUBLICATIONS

(Only Federal publications are available from Washington. Others listed may be obtained in most instances from the institution or agency issuing them. Do not write Washington for other than U.S.D.A. publications).

Federal

"Weight and Cost of Livestock Slaughtered under Federal Inspection, 1937" - Mimeographed tables by species of animals, issued by Bureau of Agricultural Economics, U.S.D.A., Washington, D.C.

"Estimated Production and Consumption of Federally Inspected Meats, 1937" - Mimeographed tables for each variety of product, issued by the Bureau of Agricultural Economics, U.S.D.A., Washington, D.C.

"A Graphic Summary of Farm Crops" by O. E. Baker and A.B. Genung, Bureau of Agricultural Economics, U.S.D.A., Washington, D.C. - Misc. Pub. No. 267, Mar. 1938, pp. 129, illus. 220.

"The Feed Grain Situation" (Spring Outlook Issue) - Bureau of Agricultural Economics, U.S.D.A., Washington, D.C., - Mar. 1938, pp. 34, 17 tables. (Mimeographed).

"Hay Quality - Relation to Production and Feed Value" by E.O. Pollock and W.H. Hosterman, Bureau of Agricultural Economics, Washington, D.C. - Mar. 1938, pp. 28 (graphs and tables).

"The Approximate Composition of Cuts from Lamb Carcasses of Different Degrees of Fatness" by O.G. Hankins and Paul E. Howe, Bureau of Animal Industry, U.S.D.A., Washington, D.C. - Mar. 1938, pp. 2, mimeographed.

"Cold Storage Lockers for Preserving Farm-Dressed Meat" by K. F. Warner, Bureau of Animal Industry, U.S.D.A., Washington, D. C. - A.H.D. No. 16 Rev., Mar. 1938, pp. 9, mimeographed.

"Feeding Garbage to Hogs" by J. H. Zeller, Bureau of Animal Industry, U.S.D.A., Washington, D.C. - A.N.D. No. 3, Mar. 1938, pp. 8, mimeographed.

"Mule Production" by J. O. Williams and S. R. Speelman, Bureau of Animal Industry, U.S.D.A., Washington, D.C. - Farmers' Bulletin No. 1341 revised, Feb. 1938, pp. 28, illus. 24.

"Breeding Goats" by W.V. Lambert, Bureau of Animal Industry, U.S.D.A., Washington, D.C. - Yearbook Separate No. 1600, pp. 34.

"Wintering Beef Cows on the Range With and Without a Supplement of Cottonseed Cake" by W.H. Black, J.R. Quesenberry and A.L. Baker, Bureau of Animal Industry, U.S.D.A., Washington, D.C. - Tech. Bul. No. 603, Feb. 1938, pp. 21, illus. 7.

"Summary of Range-Livestock and Range-Management Extension Work in the Eleven Western States 1932 to 1936, Inclusive" - Extension Service, U.S.D.A., Washington, D.C. - Circular 281, Parts I and II (in 3 separate sections), Jan. 1938, mimeographed.

State

"Electric Pig Brooders" by J. R. Tavernetti and E.H. Hughes, - California Experiment Station Bulletin 618, Dec. 1937, pp. 8, illus.

"Workstock" by W.S. Anderson - Kentucky Extension Service Circular No. 306, Nov. 1937, pp. 31, illus. 7.

"The Trench Silo" by A. J. Bell - Michigan Extension Service Bulletin 188, Jan. 1938, pp. 7, illus. 3.

"Ropework" by J. Grant Dent - Minnesota Extension Service Special Bulletin 192, Nov. 1937, pp. 28, illus. 27.

"How to Make a Rope Halter for Showing Calf or Colt," by Paul F. Newell and C.J. Goodell - Mississippi Extension Service Leaflet No. 11, Mar. 1938, pp. 4, illus. 8.

"Growth and Development, With Special Reference to Domestic Animals, XLIII. Diurnal Metabolic and Activity Rhythms," by V.V. Herring and Samuel Brody - Missouri Experiment Station Research Bulletin 274, Feb. 1938, pp. 30, illus. 8.

"An All-Year Pasture System for Missouri," by W.C. Etheridge, et al - Missouri Experiment Station Circular 193, Feb. 1937, pp. 12.

"Wintering Livestock," by I.M.C. Anderson - Montana Extension Service Circular No. 82, May 1937, pp. 12.

"The Use of Alfalfa and Native Grass Pasture in Producing Finished Cattle," by Marvel L. Baker - Nebraska Experiment Station Bulletin 315, Apr. 1938, pp. 16, illus. 5.

"Grain and Forage Sorghums in Nebraska," by T.A. Kiesselbach, et al - Nebraska Experiment Station Bulletin 316, Apr. 1938, pp. 28, illus. 12.

"The Prevention of Anthrax," by L. Van Es - Nebraska Experiment Station Circular 56, Feb. 1938, pp. 7.

"Hog Feeding Experiments," by F.B. Headley - Nevada Experiment Station Bulletin No. 147, Dec. 1937, pp. 30.

"Making Silage from Hay Crops," by A.E. Perkins, et al - Ohio Experiment Station Bimonthly Bulletin 190, Jan.-Feb. 1938.

"Cooperative Experiments in Pasture Improvement" by D. R. Dodd - Ohio Experiment Station Bimonthly Bulletin 191, Mar.-Apr. 1938.

"Rate of Salt Absorption in Curing Pork," by P.T. Ziegler and R.C. Miller - Pennsylvania Experiment Station Bulletin 355, Feb. 1938, pp. 20, illus. 7.

"The Cow-Calf Project," by L.A. Richardson and J.S. Robinson - Tennessee Extension Service Special Circular No. 80, Apr. 1938, pp. 4, mimeographed.

"Work Stock Production," by L.A. Richardson and J.S. Robinson - Tennessee Extension Service Special Circular No. 83, Apr. 1938, pp. 9, mimeographed.

"Killing and Curing Pork," by Roy W. Snyder and E.M. Regengbrecht, Texas Extension Service Bulletin 94, illus.

"Take Care of the Work Horse," by B.A. Beach and J.G. Fuller - Wisconsin Extension Service Special Circular (Revised Feb. 1938), pp. 8, illus. 4.

"Variation in the Shrinkage of Wyoming Wools. I. Differences Between Duplicate Samples," by Robert H. Burns - Wyoming Experiment Station Bulletin No. 225, Feb. 1938, pp. 34, illus. 2.

Other

"If and When it Rains - The Stockman's View of the Range Question," by F.E. Mollin - American National Live Stock Association, 515 Cooper Building, Denver, Colo., Jan. 1938, illus.

"The Reduction of Losses in Marketing Live Stock," by H.R. Smith - National Live Stock Loss Prevention Board, 700 Exchange Bldg., Union Stock Yards, Chicago, Ill., 1938, pp. 24, illus.

"More Sheep on New England Farms," by H.L. Piper - New England Sheep and Wool Growers' Assn., State House, Boston, Mass., Feb. 1938, pp. 32, illus.

"Percheron Review and Members List" published by Percheron Horse Association of America, 9 Dexter Park Avenue, Union Stock Yards, Chicago, Ill.

-----oOo-----